

State of New Mexico  
Energy, Minerals and Natural Resources Department  
Oil Conservation Division

Sundry Notices and Reports on Wells

1. Type of Well  
GAS

2. Name of Operator

**BURLINGTON  
RESOURCES**

OIL & GAS COMPANY

3. Address & Phone No. of Operator

PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. Location of Well, Footage, Sec., T, R, M

1650' FSL, 990' FEL, Sec. 2, T-26-N, R-10-W, NMPM, San Juan County, NM

API # (assigned by OCD)  
30-045-06029

5. Lease Number

6. State Oil & Gas Lease #  
E-2942-2

7. Lease Name/Unit Name

Huerfano Unit

8. Well No.  
#109

9. Pool Name or Wildcat  
Angels Peak GP/Basin DK

10. Elevation:

Type of Submission

☒ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment

Type of Action

☐ Abandonment

☐ Recompletion

☐ Plugging Back

☐ Casing Repair

☐ Altering Casing

☒ Other - Pump Installation

☐ Change of Plans

☐ New Construction

☐ Non-Routine Fracturing

☐ Water Shut off

☐ Conversion to Injection

13. Describe Proposed or Completed Operations

It is intended to install a pump in the subject well according to the attached procedure.



SIGNATURE

*Peggy Cole*

Regulatory Administrator January 12, 2000

trc

(This space for State Use)

ORIGINAL SIGNED BY CHARLIE T. PERDUE

DEPUTY OIL & GAS INSPECTOR, DIST. #3

Approved by

Title

Date

JAN 14 2000

## Huerfano Unit #109

Angels Peak Gallup / Basin Dakota

Unit I, Sec. 2, T-26-N, R-10-W

Latitude / Longitude: 36°30.86334' / 107°51.55332'

Recommended Commingle and Pump Installation Procedure 1/5/2000

**Project Justification:** The Huerfano Unit #109 was completed in 1959 as a dual producer in the Gallup and Dakota formations. The Gallup was a strong producer until its rate dropped from more than 200 MCF/D to less than 20 MCF/D in the years between 1977 and 1981. It is strongly suspected that liquid loading was the culprit, and that the installation of a pumping unit will allow the Gallup (which has not produced since 1992) to again be productive. Furthermore, the Dakota has produced with an approximate 2.5% per year decline since 1970, an uncharacteristically shallow decline for the Dakota in that area, which is a sign of downhole restriction. Current production rates are 0 MCF/D from the Gallup and 55 MCF/D from the Dakota (3-month averages). Current remaining reserve estimates for the Dakota and Gallup are 733.4 MMCF and 0 MMCF respectively. It is anticipated that post-workover rates and reserves will be 152 MCF/D and 733.4 MMCF for the Dakota and 136 MCF/D and 654.7 MMCF for the Gallup.

**NOTE: ALL DEPTHS ARE MEASURED FROM KB. KB to GL was 10'**

1. Install a used C-160-173-74 pumping unit, set to pump at no greater than 9 SPM with a 74" stroke.
2. Comply with all NMOC, BLM and Burlington safety and environmental regulations. Prior to moving in rig, make one-call and then verify rig anchors and dig pit.
3. MIRU workover rig. NU relief-line and blow well down (kill with 2% KCL water only if necessary). ND WH and NU BOP with offset spool and stripping head. Test and record operation of BOP rams. Replace any WH valves that do not operate properly. Test secondary seal and install or replace if necessary. **NOTE: Have WH serviced at machine shop as needed. A single-tubing donut and WH for 2-3/8" tubing will be needed.**
4. **NOTE: The Lease Operator has indicated that both tubing strings may contain the remains of plungers. This was confirmed for the Gallup string by a 9/84 slickline report. Dakota 2-3/8" tubing set at 6909' (218 jts with turned down N-80 collars). Broach 2-3/8" tubing and set tubing plug in tubing as deep as possible. Gallup, 2-3/8", 4.7#, J-55 tubing set at 6077' (191 jts with turned down N-80 collars).** The Gallup tubing is latched into a Baker Parallel String Anchor at 6076'. To release from the anchor, PU 2,000-5,000# over string weight and rotate 6-8 turns to the right at depth. TOOH and LD 2-3/8" tubing. Visually inspect tubing for corrosion and scale and notify Operations Engineer and Drilling Superintendent if either are present. ND offset spool.
5. PU Dakota 2-3/8" string weight and rotate 10 turns to the right at the packer to release seal assembly from Guiberson AG packer (set at 6231'). No manipulation is necessary to release the tubing anchor. TOOH and stand back 2-3/8" tubing. LD seal assembly and tubing anchor. Visually inspect tubing for corrosion, and replace any bad joints. Check tubing for scale and notify Operations Engineer and Drilling Superintendent if it is present.
6. PU and TIH with 6-3/8" rotary shoe and packer retrieval spear (PRS), bumper sub, and hydraulic jars on 2-3/8" tubing. Mill over packer's upper slips with air/mist and retrieve the packer. **NOTE: When using air/mist, mist rate must not be less than 12 bph.** TOOH and LD packer and retrieval assembly.

7. PU 4-3/4" bit and bit sub on 2-3/8" tubing and TIH to PBTD (6936'), cleaning out with air/mist. Speak with Operations Engineer and Drilling Superintendent, and if necessary, determine the best way to remove scale from the casing and perforations:- PU above the Gallup perforations at 5905' and flow the well naturally, making short trips for clean-up when necessary. Discuss sand production with Operations Engineer and Drilling Superintendent to determine when clean-up is sufficient. TOO H with 2-3/8" tubing to LD bit and bit sub.
8. Rabbit all tubing prior to TIH. TIH with purge valve, one joint of 2-3/8", 4.7# tubing, 4' perforated sub, in-line check, 1.78" seating nipple, and then the remaining 2-3/8" tubing. Replace any bad joints.
9. Land tubing at +/- 6916'. **NOTE: If excessive fill was encountered, discuss this landing depth with Operations Engineer and Drilling Superintendent.** ND BOP and NU WH with stuffing box from Henry Production (contact Richard Lopez). Pump off check.
10. If excessive fill was encountered, discuss running a sand screen below the pump with the Operations Engineer and Drilling Superintendent. PU and TIH with 2" x 1.25" x 10' x 14' RHAC-Z insert pump, one 1-1/4" sinker bar (5/8" pin with 3/4" crossover), and 3/4" Grade D rods with spray metal couplings to surface. Test pump action and hang rods on pumping unit. RD and MOL. Return well to production.

**Operations Engineer:**

**Field Specialist:**